

In the Claims:

Please amend the claims as follows:

1. (currently amended) A method for manufacturing a power capacitor comprising at least one capacitor element, wherein the capacitor element comprises a roll of alternate dielectric films and electrode films, wherein the roll has first and second end surfaces, facing away from each other, in which said electrode films are connectably exposed, the method comprising:

preheating a solder tip in a solder pot with a preheated pre-solder,

automatically coating the solder tip with pre-solder in the solder pot,

coating at least one of the end surfaces of the capacitor element with the pre-solder by bringing the coated solder tip into contact with said at least one end surface of the capacitor element,

moving the solder tip along the at least one end surface of the capacitor element,

ceasing the contact between the solder tip and said at least one end surface of the capacitor element, and

fixing at least one lead to said pre-solder by soldering the at least one lead to said pre-solder on said at least one end surface of the capacitor element with ~~a second solder~~ another solder,

wherein at least the pre-soldering of the at least one end surface of the capacitor element is automated.

2. (previously amended) The method according to claim 1, wherein the capacitor

element is wound from the electrode films, comprising a first aluminum foil and a second aluminum foil, with at least one intermediate dielectric film of a polymer material, wherein the first aluminum foil at the first end surface of the capacitor element is arranged so as to project outside the edge of the polymer film, whereas at the same first end surface of the edge of the capacitor element the edge of the second aluminum foil is arranged with its edge inside the edge of the polymer film so that the end of the capacitor element exhibits the shape of a roll of the first aluminum foil only and the second aluminum foil is arranged so that the second end of the capacitor element in a corresponding way exhibits the shape of a roll of the second aluminum foil only, that wherein the solder tip comprises an active tip which is coated with the pre-solder, and wherein the solder tip, after having been brought into contact with the end surface of the capacitor element, is moved along the end surface of the capacitor element.

3. (previously amended) The method according to claim 2, wherein the movement is carried out in one sequence comprising a starting point, two turning points between which the solder tip is moved in one or more cycles, and one end point from which the solder tip is removed from the end surface of the capacitor element, whereby the first or the second turning point may be the same as the starting point or the end point.

4. (previously amended) The method according to claim 2, wherein the speed of movement of the solder tip along the end of the capacitor element is between 0 m/s and 0.1 m/s.

5. (previously amended) The method according to claim 1, wherein the solder tip when first being brought into contact with the end of the capacitor element presses down the end

surface of the capacitor element.

6. (previously amended) The method according to claim 5, wherein the solder tip is pressed down to a depth of between 0 and 6 mm in the end surface of the capacitor element.

7. (previously amended) The method according to claim 6, wherein the solder tip is arranged on a shaft, whereby the shaft is journalled in a bearing housing which permits relative axial movement, wherein the depth into which the solder tip is pressed down is determined by the total weight of the solder tip and the shaft and by the friction in the bearing housing.

8. (previously amended) The method according to claim 6, wherein the solder tip is arranged on a shaft, whereby the shaft is journalled in a bearing housing that permits relative axial movement, and that wherein the shaft is provided with a compression spring, whereby the depth into which the solder tip is pressed down is determined by the total weight of the solder tip, the shaft and the compression spring, the friction in the bearing housing plus the compression of the compression spring.

9. (previously amended) The method according to claim 1, wherein the solder tip is arranged on a shaft, whereby the solder tip during the pre-soldering is brought to rotate in the direction of rotation of the shaft.

10. (previously amended) The method according to claim 9, wherein the solder tip is brought to rotate in one or the other direction of rotation, or wherein the rotation is reversing.

11. (previously amended) The method according to claim 10, wherein the rotation is less than one complete turn, that is, is less than 360°.

12. (previously amended) The method according to claim 1, wherein the temperature of the pre-solder in the solder pot is in the interval of between 300°C and 400 °C.

13. (previously amended) The method according to claim 1, wherein the pre-solder contains tin and zinc.

14. (previously amended) The method according to claim 13, wherein the pre-solder contains 75% tin and 25% zinc.

15. (withdrawn) Equipment for carrying out the method according to claim 1, the equipment comprising:

a solder pot,

a solder head comprising a first linear module for movements in the x-direction (horizontally) and a second linear module for movements in the y-direction (vertically),

a press unit for fixing the capacitor elements, and

a steel frame on which the solder pot, the solder head, the first and second linear modules and the press unit are arranged.

16. (withdrawn) The equipment according to claim 15, wherein the solder head

comprises a solder tip including an active tip, said solder tip being arranged on a shaft and a turning device, whereby the shaft is connected to the turning device with an insulating shaft and whereby the shaft is journalled in a bearing housing.

17. (withdrawn) The equipment according to claim 16, wherein the shaft and the insulating shaft are arranged so that a guide pin prevents relative axial movement.

18. (withdrawn) The equipment according to claim 16, wherein the shaft and the insulating shaft are arranged so that a guide pin, running in an axial slit, makes possible a relative axial movement.

19. (withdrawn) The equipment according to claim 18, wherein a compression spring is arranged between the shaft and the turning device, whereby the compression spring counteracts the shaft being moved in a direction towards the turning device.

20. (withdrawn) The equipment according to claim 16, wherein the turning device is arranged so that a rotating movement is transmitted to the solder tip.

21. (withdrawn) The equipment according to claim 16, wherein the active tip is arranged with a rotationally symmetrical cross section.

22. (withdrawn) The equipment according to claim 21, wherein the active tip is arranged with a smooth end surface.

23. (withdrawn) The equipment according to claim 21, wherein the active tip is arranged with an end surface with turned circular recesses.

24. (withdrawn) The equipment according to claim 21, wherein the active tip is arranged with recesses so as to form a grid-like pattern on the end surface.

25. (withdrawn) The equipment according to claim 21, wherein the active tip is arranged with a cupped end surface.

26. (withdrawn) The equipment according to claim 16, wherein the active tip is arranged with a rectangular cross section.

27. (withdrawn) The equipment according to claim 15, wherein the equipment comprises a programmable logic controller and a control panel for controlling the solder pot, the solder head, the first and second linear modules, and the press unit.